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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/912,282 | 07/24/2001 | David Perkinson | 72127 | 5189 |

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| EXAMINER | |
|---|---|
| ZHONG, CHAD | |
| **ART UNIT** | **PAPER NUMBER** |
| 2152 | |

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/912,282 | PERKINSON ET AL. | |
| | Examiner | Art Unit | |
| | Chad Zhong | 2154 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *12 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *07/24/01*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

1. Claims 1-11 are presented for examination.

2. It is noted that although the present application does contain line numbers in specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant all future correspondence should include the recommended line numbering.

3. Applicant is required to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification. The status of all citations of US filed applications in the specification should also be updated where appropriate.

4. The use of the trademark Sprint among others have been noted in this application (pg 2). It should be capitalized wherever it appears and be accompanied by the generic terminology. Appropriate correction is required throughout the entire application.

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al. (hereinafter Williams), US 6,144,669, in view of 'Official Notice', further in view of Eslambolchi et al. (hereinafter Eslambolchi), US 2001/0000700.

7. As per claim 1, Williams teaches for use with a frame relay network through which virtual circuits are established to enable communications between terminal equipments, a respective terminal equipment being coupled to said frame relay network by way of a processor-controlled frame relay communication device, a processor-executed auto-configuration routine for automatically configuring said frame relay communication device for operation with said frame relay network comprising the steps of:

(a) during a configurable time interval, monitoring said frame relay network for a poll from another frame relay communication device (Col. 5, lines 30-45);

(b) in response to receiving a poll from another frame relay communication device during the random time interval of step (a), automatically configuring said frame relay communication device as a frame relay access device that uses the signaling protocol in the received poll and exiting said routine (Col. 6, lines 15-35); but

(c) in response to the expiration of said configurable time interval without having received a poll from another frame relay communication device, transmitting one or more polling messages, using different signaling protocols, as necessary, over said frame relay network (Col. 5, lines 30-45; Col. 6, lines 5-35, wherein even after the timeout occurs, the polling of frame relay devices would not stop); and

8. Williams does not explicitly teaches of random time interval. "Official Notice" is taken that the concept and advantages of providing for random number generator is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include this function with Williams because it would provide for automatically setting the polling times at random thus to avoid potential collisions and/or congestion on the network. Furthermore, the polling times of Williams indicate it can be set arbitrarily, thus it would have been obvious to use plurality of means to set the polling time interval including random number generator.

9. Williams does not explicitly teach

(d) in response to receiving a response from another frame relay communication device to a polling message transmitted in step (c), automatically configuring said frame relay communication device as a switch mode access device that uses the signaling protocol of the polling message to which a response was received, and exiting said routine.

10. Eslambolchi teaches the above section for example [0011]

11. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Williams and Eslambolchi because they both dealing with frame relay network. Furthermore, the teaching of Eslambolchi to allow
automatically configuring said frame relay communication device as a switch mode access device that uses the signaling protocol of the polling message to which a response was received, and exiting said routine
would improve the robustness for Williams's system by providing for backup configuration for Frame Relay devices in event of a failure.

12. As per claim 2, Williams teaches the processor-executed auto-configuration routine according to claim 1, further comprising the step of:

(e) in response to failing to receive a response from another frame relay communication device to any polling message transmitted in step (c), repeating steps (a)-(d) as necessary, until either a poll or a response to a polling message is received from another frame relay communication device, and configuring said frame relay communication device in accordance with the signaling protocol of the received poll or response (Col. 5, lines 30-45; Col. 6, lines 10-35, wherein the polling doesn't stop in the event of a time out, the polling continues in parallel as the set time interval).

13. As per claim 3, Williams teaches the processor-executed auto-configuration routine according to claim 2, wherein step (e) comprises repeating steps (a)-(d) using a different random time interval (Col. 5, lines 30-45; Col. 6, lines 10-35).

14. Williams does not explicitly teaches the random time, this issue is dealt with, please refer to claim 1 above.

15. As per claim 4, claim 4 is rejected for the same reasons as rejection to claim 1 above.

16. As per claim 5, Williams teaches the processor-executed auto-configuration routine according to laim 4, wherein said respective signaling protocol comprises a selected one of ANNEX D, ANNEX A and GROUP OF 4 signaling protocols, and wherein said further signaling protocol comprises a selected other of said ANNEX D, ANNEX A and GROUP OF 4 signaling protocols (Col. 5, lines 20-30).

17. As per claim 6-7, claims 6-7 are rejected for the same reasons as rejection to claim 1 above.

18. As per claim 8, claim 8 is rejected for the same reasons as rejection to claim 2 above.

19. As per claim 9, claim 9 is rejected for the same reasons as rejection to claim 3 above.

20. As per claim 10-11, claims 10-11 are rejected for the same reasons as rejection to claims 1, 5 above respectively.

***Conclusion***

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to

"MECHANISM FOR AUTOMATICALLY DETERMINING SIGNALING ROLE AND ASSOCIATED PROTOCOL OF FRAME RELAY COMMUNICATION DEVICE".

i. "Innovx Product Overview", 2000

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (703) 305-0718. The examiner can normally be reached on M-F 7am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 703-305-8498. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CZ
October 14, 2004

Dung C. Dinh
Primary Examiner